Session 3 – Assignment 2

Problem Statement 2. Create a class Student which has some private data like name, phone number, roll number, class, use getter and setters to access this private data.

```java
/**Create a class Student which has some private data like name, phone number, roll number,

class, use getter and setters to access this private data.

*/

public class Student

{

    // private variables declared

    // these can only be accessed by

    // public methods of class

    private String studentName;

    private int studentRoll;

    private int studentAge;


    // get method for age to access

    // private variable studentAge

    public int getAge()

    {

      return studentAge;

    }


    // get method for name to access

    // private variable studentName

    public String getName()

    {

      return studentName;

    }
```

```java
    // get method for roll to access
    // private variable studentRoll
    public int getRoll()
    {
        return studentRoll;
    }
    // set method for age to access
    // private variable studentage
    public void setAge( int newAge)
    {
        studentAge = newAge;
    }
    // set method for name to access
    // private variable studentName
    public void setName(String newName)
    {
        studentName = newName;
    }
    // set method for roll to access
    // private variable studentRoll
    public void setRoll( int newRoll)
    {
        studentRoll = newRoll;
    }
}

/**
```

Following is the program to access variables of the class Student. Compile this program after the Student.java is compiled. Run TestStudent successfully is compiled.

*/

```java
public class TestStudent
{
    public static void main (String[] args)
    {
        Encapsulate obj = new Encapsulate();

        // setting values of the variables
        obj.setName("Vijay");
        obj.setAge(18);
        obj.setRoll(75);

        // Displaying values of the variables
        System.out.println("student's name: " + obj.getName());
        System.out.println("student's age: " + obj.getAge());
        System.out.println("student's roll: " + obj.getRoll());

        // Direct access of studentRoll is not possible
        // due to encapsulation
        // System.out.println("student's roll: " + obj.studentName);
    }
}
```

Command Prompt

```
C:\My Programs>javac Student.java

C:\My Programs>javac TestStudent.java

C:\My Programs>java TestStudent
student's name: Vijay
student's age: 18
student's roll: 75

C:\My Programs>
```